

Serial No. 09/671,120

**REMARKS**

**INTRODUCTION**

In accordance with the foregoing, claim 3 has been amended. No new matter is being presented, and approval and entry are respectfully requested.

Claims 1-15 are pending and under consideration. Reconsideration is respectfully requested.

**ALLOWABLE SUBJECT MATTER**

In the outstanding Office Action at page 2, the Examiner indicated that claims 8-11 are allowed.

**CLAIM OBJECTIONS**

In the outstanding Office Action at page 3, claim 3 was objected to as being dependent upon a rejected base claim. The Office Action indicated that claim 3 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claim 3 has been amended to include all of the limitations of independent claim 1. Accordingly, Applicants respectfully submit that amended independent claim 3 is in condition for allowance.

**REJECTION UNDER 35 U.S.C. §102**

In the Office Action at page 3, numbered item 10, claims 1, 2, 6, and 12-15 were rejected under 35 U.S.C. §102(e) as being anticipated by newly-cited U.S. Patent No. 6,385,643 to Jacobs, et al. This rejection is traversed and reconsideration is requested.

Independent claim 1 is directed to a service distribution device for distributing specified services among a plurality of servers in which there is a difference in processing capacity on a network to balance the server loads. The service distribution device includes, in relevant part, "a server modeling module setting up a simulation model for each server from the server log," "a service modeling module setting up a simulation model for each service from the service log," "a simulator reading in the server model and the service model and running each simulation," and "a server selection module selecting and specifying an optimum server to distribute services to based on a simulator result."

In the outstanding Office Action at page 5, Jacobs is alleged to teach "a server modeling module setting up a simulation model for each server from the server log" at col. 11, lines 17-45. Applicants respectfully disagree and submit that the cited portion of Jacobs teaches only that a

Serial No. 09/671,120

replica handler 506 selects an appropriate server based on an appropriate load balancing method. Jacobs provides no teaching or suggestion that a server modeling module sets up "a simulation model for each server from the server log," as recited in independent claim 1.

In the outstanding Office Action at page 5, Jacobs is alleged to teach "a service modeling module setting up a simulation model for each service from the service log" at col. 11, line 52, to col. 12, line 15 and in Fig. 6a, item 604. Applicants respectfully disagree. Jacobs at col. 12, lines 5-7, states only that "In logic block 604, a naming service is contacted and an updated list of the current service providers is obtained." Thus, Applicants respectfully submit that Jacobs fails to teach or suggest "a service modeling module setting up a simulation model for each service from the service log," as recited in independent claim 1.

In the outstanding Office Action at pages 5-6, Jacobs is alleged to teach "a simulator reading in the model and the service model and running each simulation" at col. 11, lines 1-17 and Fig. 5b, item 504. Item 504 is described by Jacobs as a "client." Applicants respectfully submit that Jacobs fails to teach or suggest "a simulator reading in the model and the service model and running each simulation" as recited in independent claim 1.

In the outstanding Office Action at page 6, Jacobs is alleged to teach "a server selection module selecting and specifying an optimum server to distribute services to based on a simulator result," and col. 11, lines 37-52 are cited in support of this position. Jacobs, however, fails to teach or suggest any sort of simulation, and the cited portion of Jacobs fails to teach or suggest the distribution of services based on a simulator result.

As Jacobs fails to teach or suggest all of the features of independent claim 1, Applicants respectfully submit that independent claim 1, and those claims depending directly or indirectly therefrom, patentably distinguish over the prior art and are, therefore, in condition for allowance.

In the outstanding Office Action at page 7, numbered item 14, Jacobs is alleged to teach all of the features of independent claim 12. The Office Action alleges that Jacobs at col. 10, lines 8-27, teaches "a server modeling module generating a simulation model for each server and a service modeling module generating a simulation model for each service based on a server log and a service log of captured server communication." While Jacobs teaches that a client-side and server-side communicate through RJVMs, Jacobs fails to teach or suggest that simulation models are generated for each server and service. Jacobs is alleged to teach "a simulator reading the server models and the service models and running a plurality of simulations" at col. 11, lines 9-14. The cited portion of Jacobs, however, fails to teach or

Serial No. 09/671,120

suggest a simulator reading any models, or running any simulations. Jacobs is alleged to teach "a server selection module determining which servers have low loads based on results of the simulations and selecting the servers with low loads to receive the services" at col. 11, lines 41-43. Applicants respectfully submit, however, that Jacobs does not teach "a server selection module determining which servers have low loads based on results of the simulations," as recited in independent claim 12.

As Jacobs fails to teach or suggest all of the features of independent claim 12, Applicants respectfully submit that independent claim 12, and those claims depending directly or indirectly therefrom, patentably distinguish over the prior art and are, therefore, in condition for allowance. Independent claims 13-15 recite features similar to those of independent claim 12. Applicants respectfully submit that independent claims 13-15 patentably distinguish over the prior art for reasons similar to those of independent claim 12.

#### REJECTIONS UNDER 35 U.S.C. §103

In the Office Action at page 10, numbered item 25, claim 4 was rejected under 35 U.S.C. §103 as being unpatentable over Jacobs in view of Jain and Kleinrock. The reasons for the rejection are set forth in the Office Action and therefore not repeated. The rejection is traversed and reconsideration is requested.

Claim 4 depends directly from independent claim 1. Jain and Kleinrock are relied upon to teach the features not found in independent claim 1. Neither Jain nor Kleinrock, taken alone or in combination, cure the deficiencies noted in Jacobs as to claim 1. Moreover, the scale of parameters  $D_i$  and  $D$  in Jain is a ratio for a server. The present invention, in contrast, uses a ratio for service. Thus, using the parameters of Jain, it is not possible to explain the difference between services whose number of sessions varies. Parameter  $T$  in Jain is a time interval between two transmissions. The present invention, in contrast, recites "a session starting frequency or time interval," and each session may include a plurality of transmissions. The parameter  $V_i$  of Jain refers to a number of requests, rather than "a number of transmissions between the client and the server per session," as recited in claim 4. The parameter  $I$  of Jain is an idle time, which is the time that the server does not process any service. Claim 4, in contrast, recites "a time from the server response until the client response," so the server may process services for other clients in the time between the server response and the client response.

Serial No. 09/671,120

Accordingly, Applicants respectfully submit that Jacobs, Jain, and Kleinrock, taken alone or in combination, fail to teach or suggest all of the features of dependent claim 4. Thus, claim 4 patentably distinguishes over the prior art and is in condition for allowance.

In the Office Action at page 11, numbered item 27, claim 5 was rejected under 35 U.S.C. §103 as being unpatentable over Jacobs in view of Kleinrock. The reasons for the rejection are set forth in the Office Action and therefore not repeated. The rejection is traversed and reconsideration is requested.

Claim 5 depends directly from independent claim 1. Kleinrock is relied upon to teach the features not found in independent claim 1. Kleinrock, however, fails to cure the deficiencies noted in Jacobs as to claim 1. Moreover, Kleinrock fails to teach or suggest the use of a median value. Accordingly, Applicants respectfully submit that Jacobs and Kleinrock, taken alone or in combination, fail to teach or suggest all of the features of dependent claim 5. Thus, claim 5 patentably distinguishes over the prior art and is in condition for allowance.

In the Office Action at page 13, numbered item 29, claim 7 was rejected under 35 U.S.C. §103 as being unpatentable over Jacobs in view of Zhu. The reasons for the rejection are set forth in the Office Action and therefore not repeated. The rejection is traversed and reconsideration is requested.

Claim 7 depends indirectly from independent claim 1. Zhu is relied upon to teach the features not found in independent claim 1. Zhu, however, fails to cure the deficiencies noted in Jacobs. Accordingly, Applicants respectfully submit that Jacobs and Zhu, taken alone or in combination, fail to teach or suggest all of the features of dependent claim 7. Thus, claim 7 patentably distinguishes over the prior art and is in condition for allowance.

## CONCLUSION

In accordance with the foregoing, it is respectfully submitted that all outstanding objections and rejections have been overcome and/or rendered moot. And further, that all pending claims patentably distinguish over the prior art. Thus, there being no further outstanding objections or rejections, the application is submitted as being in condition for allowance which action is earnestly solicited.

If the Examiner has any remaining issues to be addressed, it is believed that prosecution can be expedited by the Examiner contacting the undersigned attorney for a telephone interview to discuss resolution of such issues.

Serial No. 09/671,120

If there are any underpayments or overpayments of fees associated with the filing of this Amendment, please charge and/or credit the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

Date:

September 14, 2005

By:

David M. Pitcher

David M. Pitcher

Registration No. 25,908

1201 New York Avenue, NW, Suite 700  
Washington, D.C. 20005  
Telephone: (202) 434-1500  
Facsimile: (202) 434-1501

**CERTIFICATE OF FACSIMILE TRANSMISSION**

I hereby certify that this correspondence is being transmitted via facsimile to: Commissioner for Trademarks.

on September 14, 2005

STAAS & HALSEY LLP

By: David M. Pitcher

Date: 9/14/05